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(54) Title: COLLOIDAL DRUG CARRIER SYSTEM

(57) Abstract: The present invention relates to a drug carrier system comprising a plurality of colloidal particles having a core and a shell, said particles being comprised of copolymer molecules, which copolymer comprises at least one A block and at least one B block different from the at least one A block, wherein the at least one A block consists of a polymer unit of a first set of monomers and the at least one B block consists of a second set of monomers. In addition, the invention relates to block copolymers that are useful in this system, as well as pharmaceutical compositions based on said colloidal system.





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A. CLASSI IPC 7	FICATION OF SUBJECT MATTER A61K9/107 C08G81/02			
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Documental	tion searched other than minimum documentation to the extent that s	uch documents are incl	uded in the fields se	earched
Electronic d	lata base consulted during the international search (name of data ba ternal	se and, where practical	l, search lerms used)
C. DOCUM	ENTS CONSIDERED TO BE RELEVANT			
Category °	Citation of document, with indication, where appropriate, of the rel	evant passages		Relevant to claim No.
X	US 5 830 986 A (SAGAR AMBUJ ET A 3 November 1998 (1998-11-03) column 7, lines 5-22	AL)		1,10
Α	EP 0 001 223 A (HOFFMANN LA ROCHE 4 April 1979 (1979-04-04) the whole document	:) 		1
Α	US 5 346 703 A (VIEGAS TACEY X E 13 September 1994 (1994-09-13) the whole document	ET AL)		1
A	US 6 153 193 A (ALAKHOV VALERY YU 28 November 2000 (2000-11-28) the whole document	J ET AL)		1
		-/		
X Furti	her documents are listed in the continuation of box C.	χ Patent family	members are listed	in annex.
l	ategories of cited documents:	*T* tater document put	plished after the inte	mational filing date the application but
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	C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT						
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.					
X	US 6 338 859 B1 (BENAHMED AMINA SOUAD ET AL) 15 January 2002 (2002-01-15) page 5, lines 7-17	1					
A	WO 01/085216 A (SEO MIN HYO ;SAMYANG CORP (KR); YI YIL WOONG (KR); YU JAE WON (KR)) 15 November 2001 (2001-11-15) the whole document						



Application No PCT/NL 03/00601

Patent document cited in search report	Publication date	-	Patent family member(s)	Publication date
US 5830986 A	03-11-1998	WO	9818494 A1	07-05-1998
EP 0001223 A	04-04-1979	AU DE DK EP FR GB IT JP NL SE	3974278 A 2840768 A1 412978 A 0001223 A2 2410012 A1 2004892 A ,B 1098848 B 54056895 A 7809205 A 7809793 A	20-03-1980 29-03-1979 20-03-1979 04-04-1979 22-06-1979 11-04-1979 18-09-1985 08-05-1979 21-03-1979 20-03-1979
US 5346703 A	13-09-1994	US US US CA DE DE DE DE DE DE JP JP	5143731 A 2002064514 A1 6346272 B1 2044878 A1 69122008 D1 69122008 T2 69133029 D1 69133029 T2 470703 T3 0470703 A1 0719545 A1 3320748 B2 4230636 A	01-09-1992 30-05-2002 12-02-2002 08-02-1992 17-10-1996 30-01-1997 11-07-2002 07-11-2002 30-09-1996 12-02-1992 03-07-1996 03-09-2002 19-08-1992
US 6153193 A	28-11-2000	AT AU CA DE DK EP ES WO JP PT US	206041 T 6628496 A 2236946 A1 69615561 D1 69615561 T2 839026 T3 0839026 A1 2163034 T3 9640056 A1 11507028 T 839026 T 6093391 A 6387406 B1	15-10-2001 30-12-1996 19-12-1996 31-10-2001 11-07-2002 21-01-2002 06-05-1998 16-01-2002 19-12-1996 22-06-1999 30-01-2002 25-07-2000 14-05-2002
US 6338859 B1	15-01-2002	AU BR WO CA CN CZ EP HU NO	7040501 A 0112054 A 0200194 A2 2414241 A1 1447683 T 20024268 A3 1296647 A2 0300963 A2 20026255 A	08-01-2002 30-09-2003 03-01-2002 03-01-2002 08-10-2003 14-05-2003 02-04-2003 29-09-2003 25-02-2003
WO 0185216 A	15-11-2001	AU CA CN EP JP WO US	5887201 A 2408548 A1 1429119 T 1280557 A1 2003532688 T 0185216 A1 2003180363 A1	20-11-2001 15-11-2001 09-07-2003 05-02-2003 05-11-2003 15-11-2001 25-09-2003